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10/669,373	09/25/2003	Jin-Woo Yu	1293.1878	3368

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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/669,373	YU, JIN-WOO	
	Examiner	Art Unit	
	Gautam R. Patel	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-15, 17-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-15, 17-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3, 5-8, 10-15, 17-20 and 22 remain for examination.

RCE STATUS

2. The request filed on 2/21/07 for Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.

REMARKS/CONTACT TRY

3. Several attempt were made to contact Mr. Michael Kondoudis and Mr. Michael D. Stein regarding sum signal explanation [4/26/07 and 4/27/07]. No phone call was not returned. Secretary did not give any alternate attorney's name when requested to do so. The Applicant is urged to update the data base. PALM Data base does not have any attorney information at all.

IMPORTANT NOTES

4. The examiner would like to thank the Applicants for clarifying signals A, B, C, and D with respect to what they are and how they are generated. As it now understood, as explained by Applicants in their remarks [and also explained in paragraph 0048 on page 10], these signals are signals which are typically generated by a photodetector [e.g. unit 201-6 fig. 2 of the present application, or fig. 3, unit 26 of Choi]. If there is a four quadrant detector, naturally four signals A to D are thus generated. This is the reason no detail description was given in the specification because one of ordinary skill in the art would have known that these signals are inherently present. Also the details of the "sum signal" now being claimed and which was held as not having support, the specification is now understood to be nothing more than standard well known and inherently present sum signal of quadrant detector.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 3, 5-8, and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Choi et al., US. patent 6,252,835 (hereafter Choi).

As to claim 1, Choi discloses the invention, an apparatus for setting an offset in a DVD player, as claimed [see Figs. 5-7], including an offset measuring unit, and an offset setting unit comprising:

an offset measuring unit [fig. 5, unit 507] which measures one or more offset parameters for initial reproducing operations of the DVD player; and

an offset setting unit [fig. 5, unit 507] which, when the offset measuring unit measures the one or more offset parameters a number of times [fig. 6, step S609], calculates an average value [fig. 6, step S612 and fig. 7] of the measured offset values of the one or more offset parameters and sets, for each of the one or more offset parameters, the average value as a set offset value of the DVD player [col. 4, line 16 to col. 6, line 4],

wherein the one or more offset parameters are a sum signal [fig. 3, unit 26; or fig. 5 signal output of pickup assembly 502. Output is A, B, C, D], a position adjustment value of focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum signals A, B, C, and D which signals are discrete voltages output by a photo diode (PD) [fig. 3, unit 26] based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc [col. 1, line 54 to col. 3, line 51; col. 4, line 16 to col. 6, line 4].

NOTE: Unit 502 of Choi, or especially more detailed unit 26 of figure 3 is equivalent to Applicants unit 201-6 of fig. 2; or 401-6 of fig. 4. also unit Choi's units 502 and 503 are equivalent of Applicants units 210 and 202 respectively and are performing the SAME function.

6. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Choi: comprising a storage unit [fig. 5, unit 508] which stores the set offset value of each of the one or more offset parameters [col. 4, lines 29-20; col. 5, lines 19-25].

NOTE: Choi stores offset values f_i and several f_0 values are stored.

7. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Choi:
the set offset values are used as reference offset values during a subsequent initial reproducing operation of the DVD player [col. 4, lines 29-20; col. 5, lines 19-25].

NOTE: Choi stores offset values f_i and several f_0 values are stored.

8. As to claims 6-8, they are method claims corresponding to claims 1, 3 and 5 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1, 3 and 5 respectively, above.

9. As to claim 10, it is drawn to a program method corresponding to the method of claim 6, and is therefore rejected for similar reasons set forth in the rejection of claim 6, above.

NOTE: Storing programs on the disc and executing them is well known and does not constitute a patentable differentiation.

Claim Rejections - 35 U.S.C. § 103

10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 11-15, 17-20 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al., US. patent 6,252,835 (hereafter Choi) as applied to claims 1, 3, 5-8, 10 above in view of Suzuki et al., US. patent 5,457,587 (hereafter Suzuki).

As to claim 11, Choi discloses all of the above elements, including offset setting averaging offset values and adjusting offset based on small increments [see fig. 6]. Choi does not specifically disclose newly measured offset values are re-measured during a subsequent initial reproduction or does not disclose a counter which counts number of times the one or more offset parameters are measured.

However, the process of re-measuring and using counter of for reiteration is well known in the art for while.

Also more importantly Suzuki clearly discloses the concept of the newly-measured offset values are measured during a subsequent initial reproducing operation of a DVD player and a counter [an internal counter] for counting number of times the one or more offset parameters are measured [figs. 3, 6 and 9; col. 3, lines 36-61; col. 7, line 63 to col. 8, line 8].

Both Choi and Suzuki are interested in improving the automatic adjusting and correcting the offset in an optical disk device.

One of ordinary skill in the art at the time of invention would have realized that the system of Choi would have been sensitive to noise that will generated when offset values become too large because extremely small track pitch and thus would have compromised the quality of the electrical signals.

Therefore, it would have been obvious to have used a counter and subsequent measurement of the offset parameters in the system of Choi as taught by Suzuki because one would be motivated to reduce noise in the system of Choi and provide better signal controls and improve quality of the signal, especially when track pitch becomes small and avoiding the noise and undesirable effects caused on the adjacent tracks [col. 2, lines 16-23; Suzuki].

11. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Suzuki:

a counter which counts the number of times the one or more offset parameters are measured to determine the number of times the one or more offset parameters are measured [col. 7, line 63 to col. 8, line 8].

12. As to claim 12, it is rejected for the similar reasons set forth in the rejection of claim 3, supra.

13. The aforementioned claim 13, recites the following elements, inter alia, disclosed in Choi:

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an offset measuring unit which measures the one or more offset parameters for initial reproducing operations of the DVD player; and

an operation unit which, when the offset measuring unit measures the one or more offset parameters a reference number of times, calculates an average value of the measured offset values for each of the one or more offset parameters, and sets the average value as the reference offset value for each of the one or more offset parameters of the DVD player [col. 4, line 16 to col. 6, line 4].

As to rest of the claim Suzuki discloses:

a counter which counts a number of times the one or more offset parameters are measured [col. 7, line 63 to col. 8, line 8].

14. The aforementioned claim 14, recites the following elements, inter alia, disclosed in Choi:

a comparator [fig. 5, unit 507] which compares, for each of the one or more offset parameters, the offset values, which are measured during initial reproducing operations of the DVD player, with the reference offset value; and

an offset adjuster [figs. 5, unit 507] which, based on a comparison result of the comparator for each of the one or more offset parameters, adjusts the reference offset value to the newly-measured offset value when the newly-measured offset value is different from the reference offset value, wherein the newly-measured offset values are measured during a subsequent initial reproducing operation of the DVD player [col. 5, line 19 to col. 6, line 16].

NOTE: unit 507 performs both these functions see fig. 6 steps 607, 610 etc.]

15. The aforementioned claim 15, recites the following elements, inter alia, disclosed in Choi:

when an error related to the offset occurs during reproducing operations of the DVD player, adjustment [\pm delta, in step S608] of an offset in the DVD player is repeated [col. 5, line 19 to col. 6, line 16].

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16. As to claim 17, it is drawn to a method corresponding to the apparatus of claim 11, and is therefore rejected for similar reasons set forth in the rejection of claim 11, above.

17. As to claims 18, it is drawn to a method corresponding to the apparatus of claims 10 & 7, and is therefore rejected for similar reasons set forth in the rejection of claims 10 & 7, above.

18. As to claims 19 & 20, they are drawn to a method corresponding to the claims 14 & 15 respectively, and are therefore rejected for similar reasons set forth in the rejection of claims 14 & 15, above.

19. As to claim 22, it is drawn to a method corresponding to the apparatus of claim 11, and is therefore rejected for similar reasons set forth in the rejection of claim 11, above.

ALTERNATE REJECTION

20. Claims 1-3, 5-8, 10-15, 17-20 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi et al., US. patent 6,252,835 (hereafter Choi) in view of Kiyoura et al., US. patent 5,600,615 (hereafter Kiyoura).

As to above claims Choi discloses the concept of focus offset values measurement storage of initial values adding delta increments to offset values repeating this operation and comparing these values [see figs. 5-7].

Choi does not specifically disclose newly measured offset values are re-measured during a subsequent initial reproduction or does not disclose a counter which counts number of times the one or more offset parameters are measured.

However Kiyoura clearly discloses the concept of re-measurement and counter for counting number of times measurement has taken place [figs. 6 & 9]. Even though these concept disclosed by Kiyoura are applied to servo gain and for CD player one of ordinary skill in the art would have applied these concept to DVD player and also to focus offset values, because the concept of stable loop control is equally applicable to any system which is concerned with

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deterioration of system parameters over a time under various environment conditions. Therefore the concept of servo control based on an error signal in CD player as disclosed by Kiyoura is equally applicable to DVD player and focus error signal because both are trying to solve the same problem under same conditions.

21. Applicant's arguments filed on 2/21/07 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "Applicant submits that Choi does not teach that microcomputer 507 measures a sum signal.

A review of fig. 5 of Choi reveals that the microcomputer 507 receives only the following three signals: [Namely f_0 , f_i , and f_2] Thus f_i and f_2 cannot be a sum signal since alleged sum signal is output by an RF amplifier" [page 9, paragraphs 1-3; REMARKS].

FIRST: Measurement of sum signal is neither claimed, nor explained in the specification. So argument regarding measurement of sum signal is moot.

SECOND: It seems the Applicant is mixing up the well known "sum signal" [from unit 201-6, the photodetector] with other signals that are fed to micro-computer. The signal f_0 already contains the sum signal see fig. 3 and 5. So even if one claims that sum signal is processed by some computer that aspect is clearly shown by Choi. Also see fig. 3 wherein sum signals are going to DIGITAL SIGNAL PROCESSOR. This is inherently done in all systems, since there is no use if signals are produced and not processed.

THIRD: It is this Examiner's understanding that generation of well known inherently present "sum signal" is NOT the main part of this invention.

FOURTH: If Applicant is trying to combine some other signals, he should not call it "sum signal" [to avoid confusion] and more importantly also show support in the specification of this newly defined summation of some other signals.

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B)That; "Because Choi does not teach that microcomputer 507 (the alleged offset measuring unit) receives a sum signal, it is not reasonable to conclude that the offset parameters measured by the microcomputer include a sum signal." [page 9, paragraph 6; REMARKS].

FIRST: As explained above 507 inherently receives sum signal. That is how this, or for that matter any other similar system, works.

SECOND: What is being claimed is NOT that sum signal has to be included with any signal. What is being claimed is that "one or more parameters correspond to a sum signal, apposition adjustment value of focus lens, a constant linear velocity" etc. in other words what is being claimed is ANY ONE of these parameters NOT all of them or any combination of them. Therefore sum signal as such does satisfy the requirement of the claim.

Contact information

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY PATENT EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

April 26, 2007